

CLAIM AMENDMENTS

1. (currently amended): A method for modifying the ~~acyltransferase (AT) domain in nature of the extender unit substrate used by~~ a first modular polyketide synthase (PKS) encoded by a first nucleic acid which method comprises:

excising by restriction enzyme reaction a first region encoding ~~a first~~ an acyltransferase (AT) domain of a first ~~said first~~ PKS-encoding nucleic acid and inserting said excised first region into a second AT-domain-encoding region of a second PKS-encoding nucleic acid from which ~~[[an]]~~ said second AT domain-encoding region has been excised,

wherein the extender unit specificity of said first region is different from the extender unit specificity of the second region

to produce nucleic acid encoding a ~~modified~~ PKS which uses a different extender unit substrate from the first PKS.

2. (original): The method of claim 1 wherein the first or second PKS is from *Saccharopolyspora erythraea*.

3. (original): The method of claim 1 wherein the first or second PKS is from *Streptomyces*.

4. (original): The method of claim 3 wherein the *Streptomyces* is *Streptomyces hygroscopicus*.

5. (original): The method of claim 1 wherein the first PKS or second PKS is selected from the group consisting of erythromycin, rapamycin, avermectin, FK-506, and tylosin.

6. (canceled)

7. (currently amended): A method for modifying the ~~AT domain in~~ nature of the extender unit substrate used by a first modular PKS encoded by a first nucleic acid which method comprises:

effecting *in vivo* recombination, wherein said recombination is from a donor plasmid comprising ~~a first~~ said first nucleic acid comprising said first AT domain-encoding region encoding a first AT domain of a first PKS-encoding nucleic acid framed by a first pair of flanking sequences,

into a recipient plasmid comprising a second nucleic acid encoding a second PKS wherein in said recipient plasmid a second AT domain-encoding region ~~encoding a second AT domain from~~ in a second PKS encoding nucleic acid is framed by a second pair of flanking sequences which are homologous to said first pair of flanking sequences,

wherein the extender unit specificity of said first region is different from the extender unit specificity of the second region

to produce nucleic acid encoding a ~~modified~~ PKS which uses a different extender unit substrate from the first PKS.

8. (original): The method of claim 7 wherein said donor and recipient plasmids comprise different selectable markers.

9. (original): The method of claim 7 wherein said donor plasmid is temperature sensitive.

10. (original): The method of claim 7 wherein the first or second PKS is from *Saccharopolyspora erythraea*.

11. (original): The method of claim 7 wherein the first or second PKS is from *Streptomyces*.

12. (original): The method of claim 11 wherein the *Streptomyces* is *Streptomyces hygroscopicus*.

13. (original): The method of claim 7 wherein the first PKS or second PKS is selected from the group consisting of erythromycin, rapamycin, avermectin, FK-506, and tylosin.

14-30. (canceled)